

Flight Scientist Report
Tuesday 05/17/2022 ACTIVATE RF155

Flight Type: Statistical Survey Flight
Flight Route: KLFY ATLC ZIBUT ISLES ZIBUT ATLC KLFY
Special Notes:

King Air

Pilot report (Coldsnow):

Flight plan was KLFY ATLC ZIBUT ISLES ZIBUT ATLC KLFY. King Air was delayed on ground for 15 minutes after falcon took off. As a result the, timing with the falcon during outbound leg was between 10-15 minutes. Due to fuel, falcon turned 30 NM early. King Air also turned around 30 NM short of ISLES so as to be overtop the falcon at YAALE (falcon executed spiral to 10K at YAALE). At ZIBUT, King Air needed to climb to FL300 to avoid traffic in the air refueling track. Abeam DELPP, the falcon exceeded 10 min in front of the King Air. Winds were out of the W/SW at 40-75 Knots. Three dropsondes were released (ZIBUT outbound, 30 NM short of ISLES, and overtop YAALE). The last dropsonde was not released at ATLC due to an issue with the instrumentation system.

Flight scientist report (Seaman):

RF155
5/17/2022 Flight 1 of 1
Takeoff: 14:04 utc
Landing: 17:29 utc

Flight path:
KLFY ATLC ZIBUT ISLES ZIBUT ATLC KLFY

Ops Notes:
Uc12 takeoff delayed relative to falcon takeoff due to landing f22s.

Ascended to FL300 for traffic directed by ATC

Instrument notes:
All operated nominally. RSP required restart during ascent.

Science notes:
Cloud-free flight. Light aerosol with some vertical structure throughout flight.

Sonde drops:
1) ZIBUT
2) ISLES

3) YAALE above center point of Falcon spiral.

Did not drop coastal sonde because AVAPS was not reading aircraft data

Falcon

Pilot report (Thorson):

Science

Flight scientist report ():

Winstead:

13:50:37 Takeoff

17:00:08 Landing

13:55:00 Virus sampling filters A & B ON

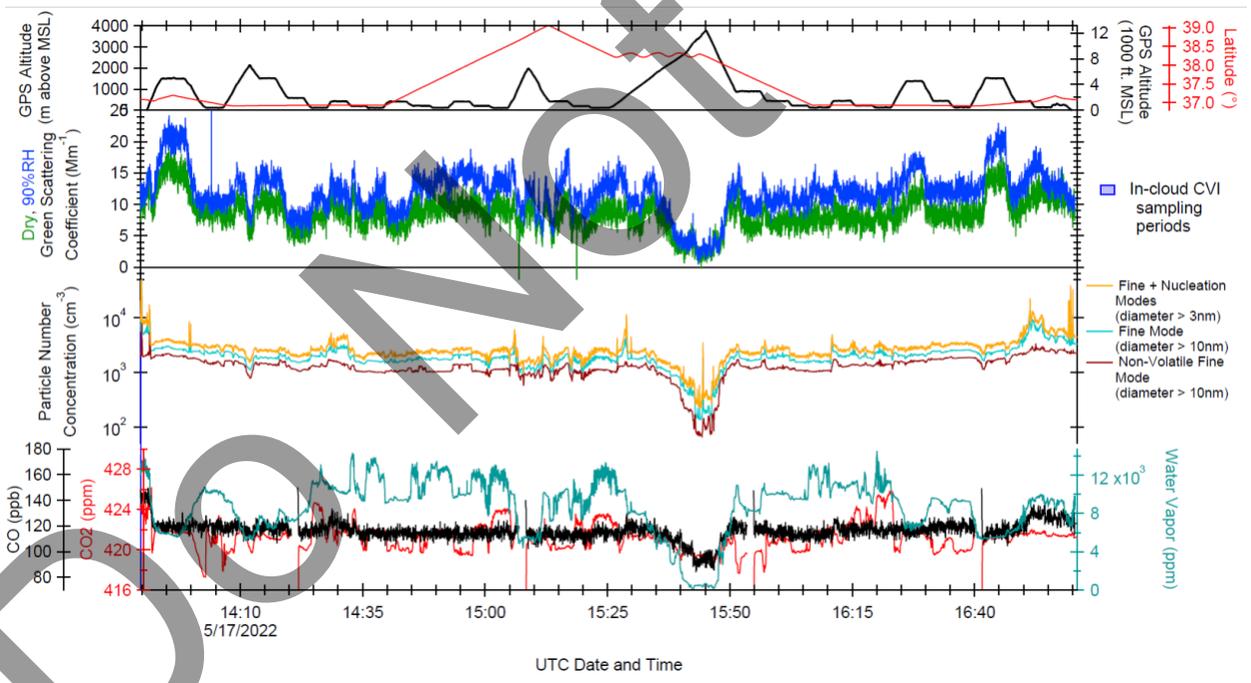
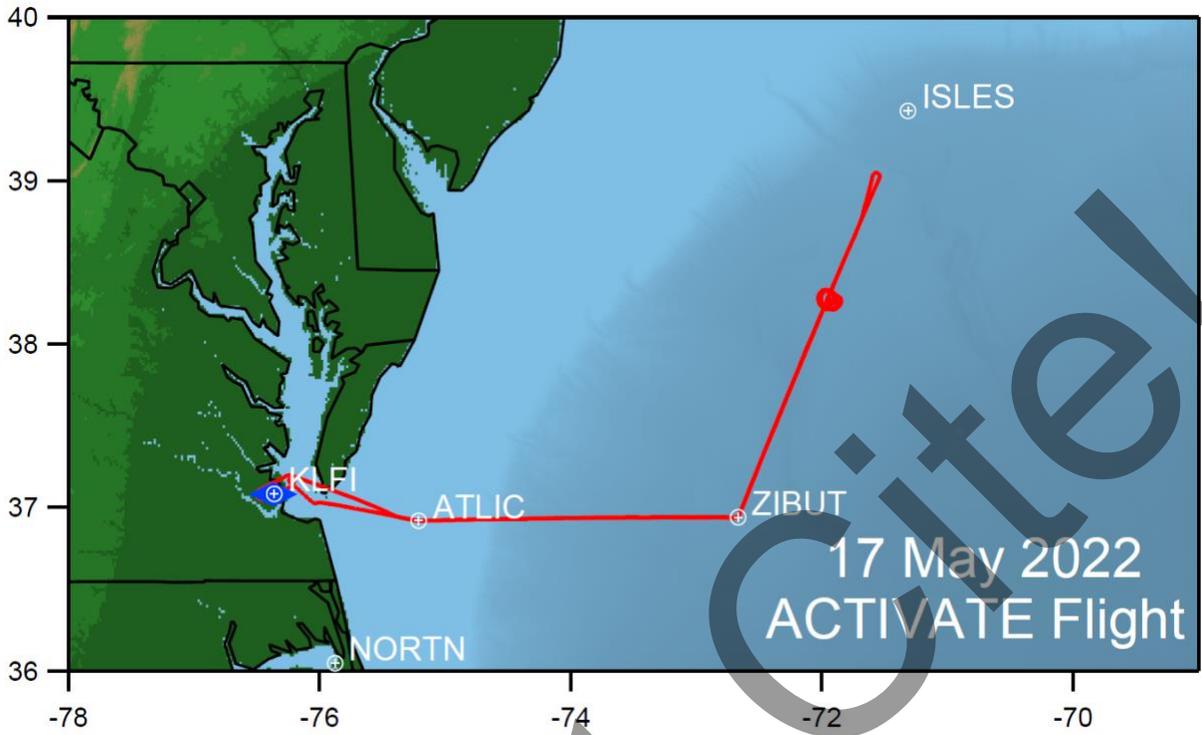
15:25:25 Start spiral up at YAALE from 500 ft at 500 ft/min

15:42:20 UC12 passing over spiral point

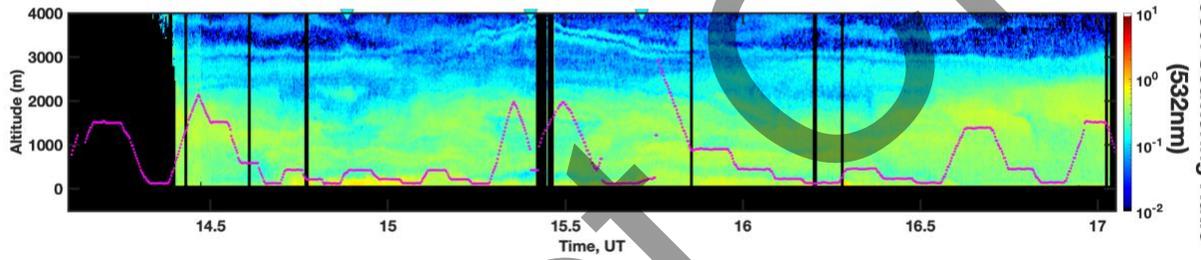
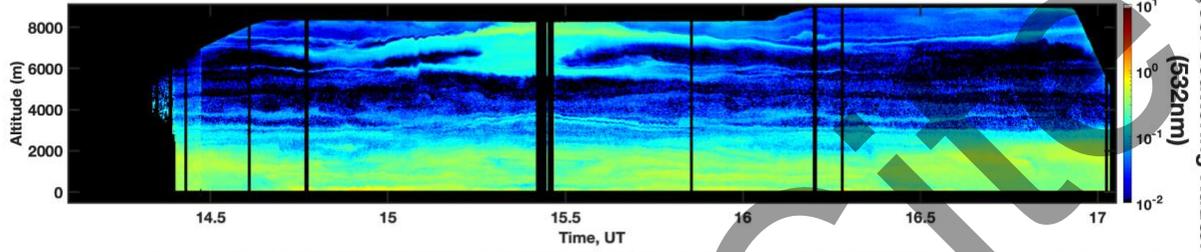
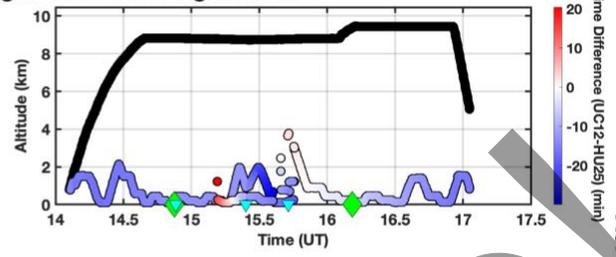
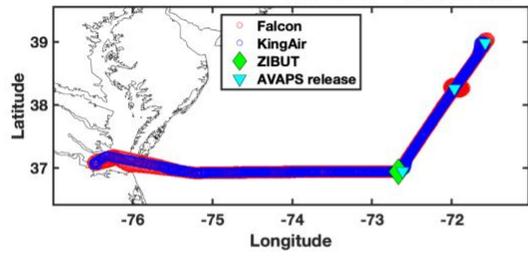
15:45:10 Top of spiral

16:51:30 Filters A & B OFF

16:53:30 WCM & humidifier off in preparation for landing



20220517 - ACTIVATE - KingAir and Falcon flight tracks

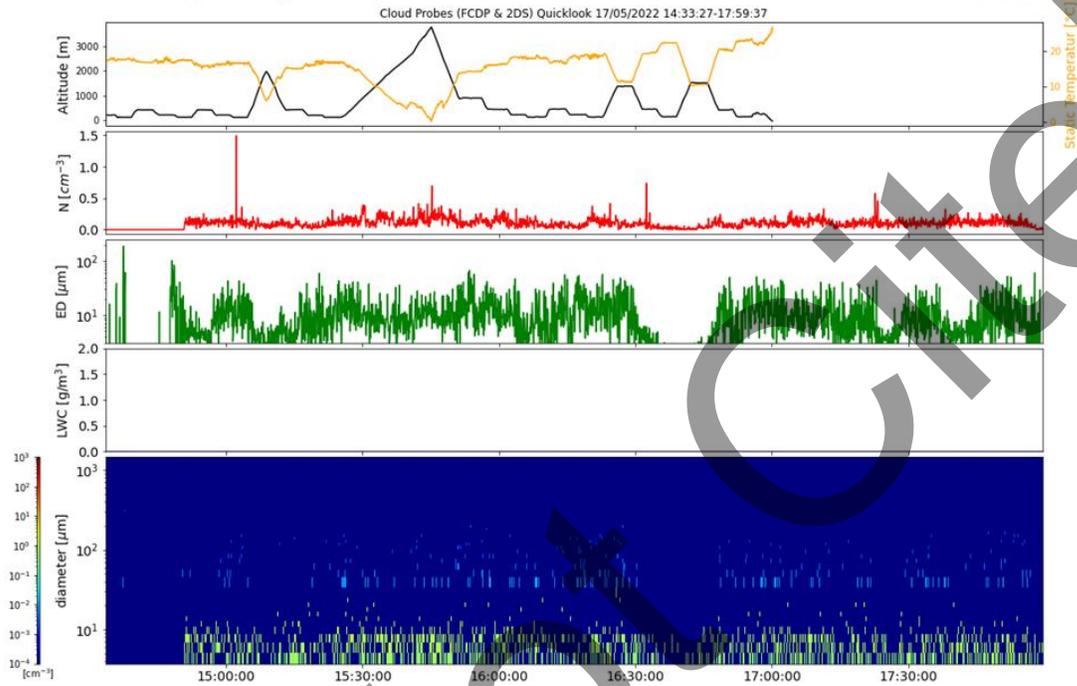


Do Not

Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie

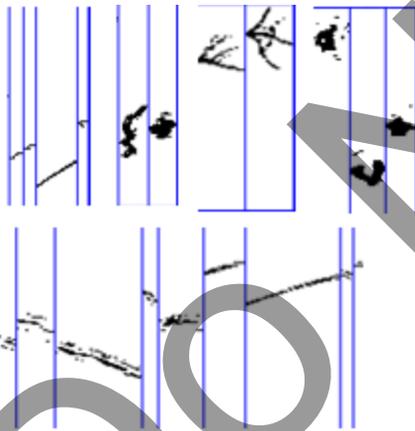
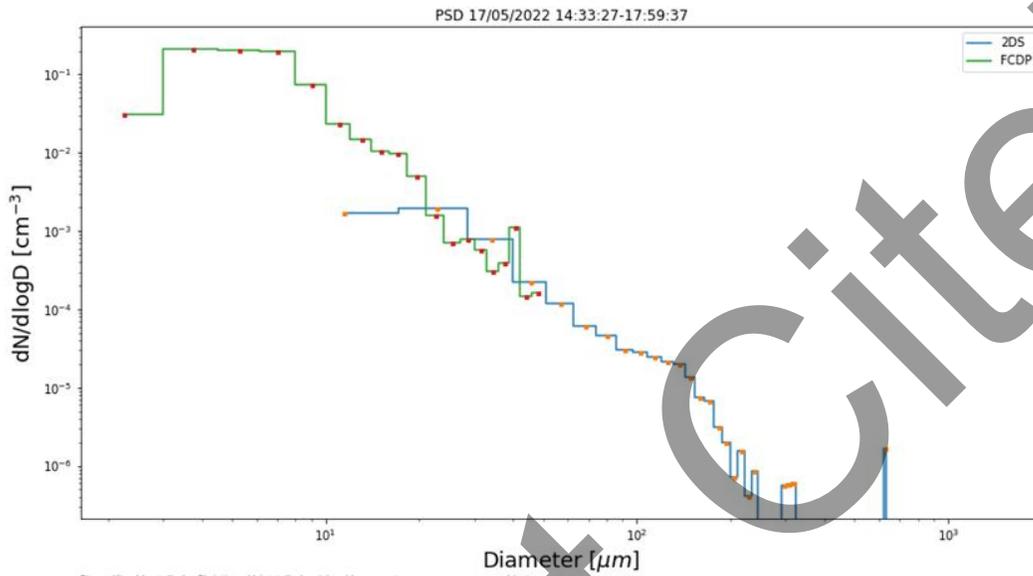


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DO NOT CITE!

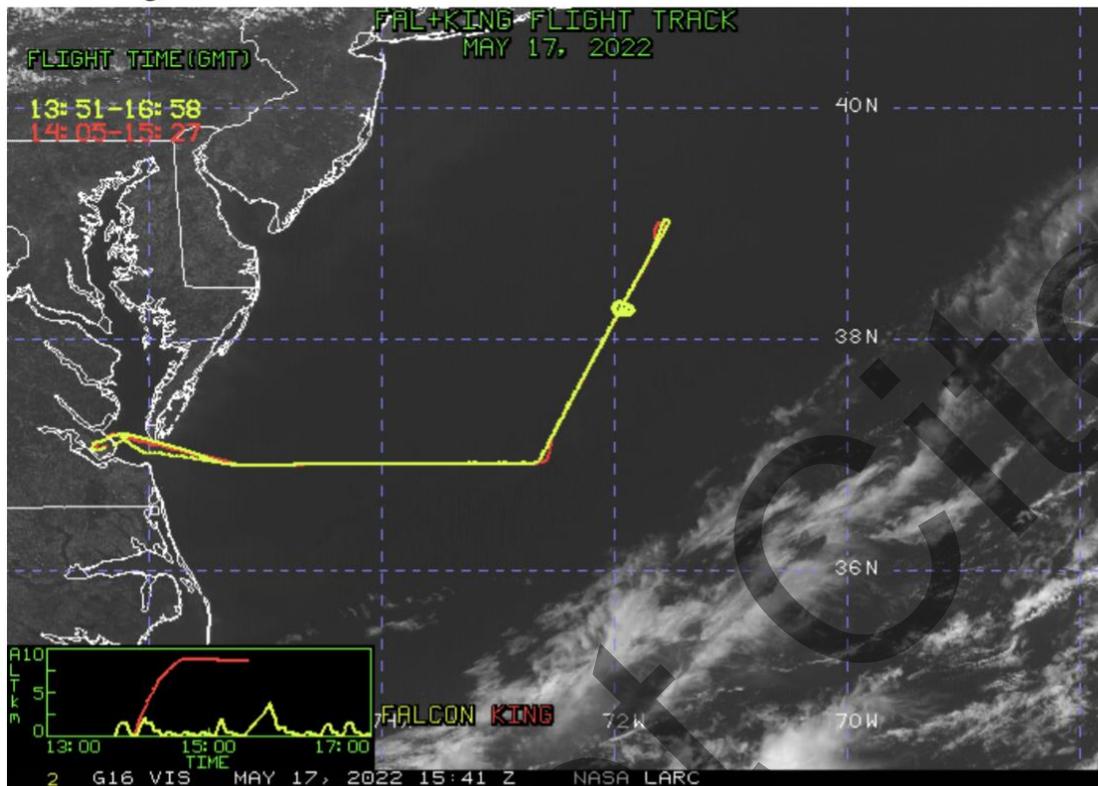
PSD ACTIVATE

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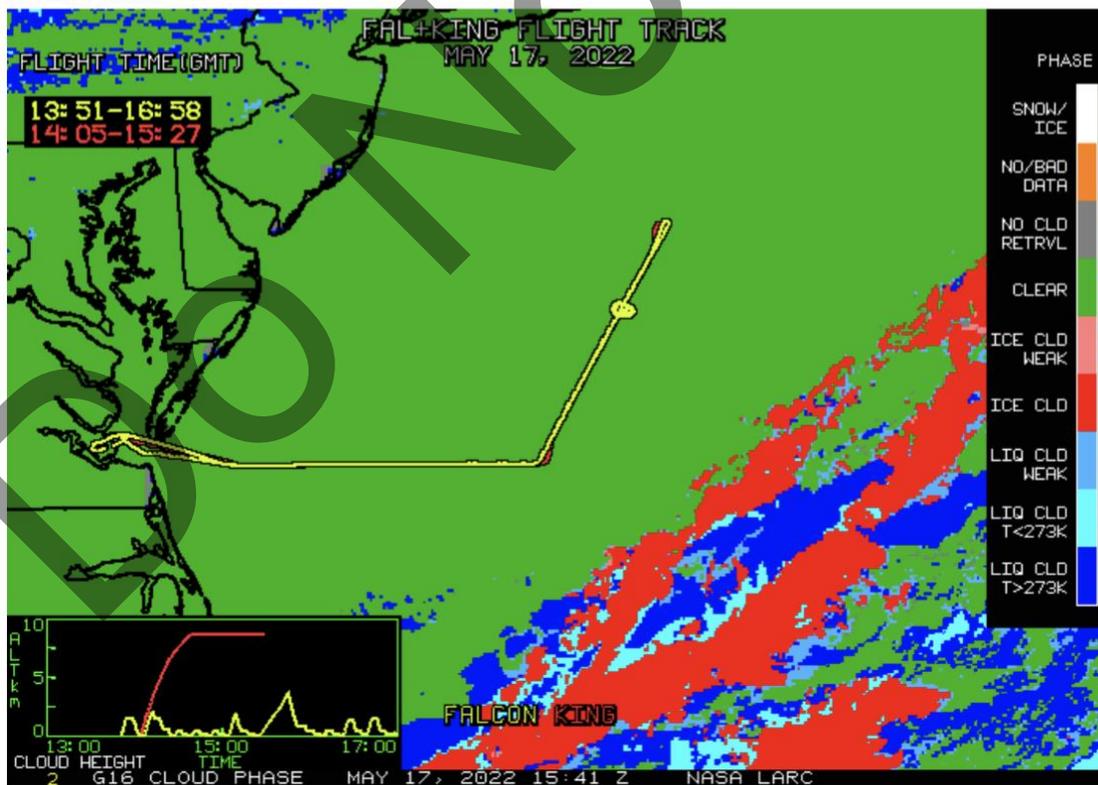


No Clouds and large Bioaerosol throughout the flight

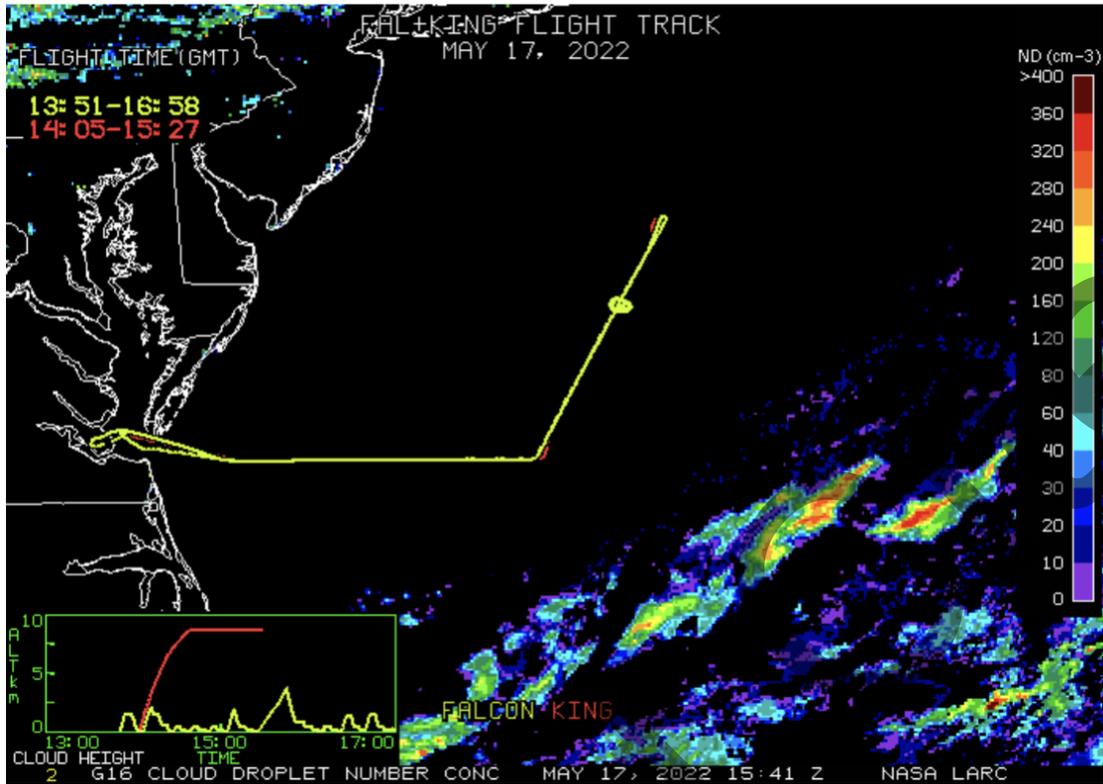
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 155, 15:41 UTC May 17, 2022
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

